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Housing Affordability: A Conceptual Overview for House Price Index

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Abstract

Housing affordability research has been carried out by many as it is one of the key measures for a country's socio-economy stability. This research is carried out to identify possible application of affordability measures including Price-Income Ratio (PIR) for measurement of first owned medium cost landed-house by the middle-income group in Malaysia. It is hoped that it could be seen as able to contribute to the ground knowledge and understanding on housing affordability for the middle-income group and variables that influenced the medium income group's ability to own first medium-cost houses in Malaysia.

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1. Introduction

Housing affordability is one of the key factors that can describe the socioeconomic stability and development of a country. Housing affordability is aimed to ensure the housing provided is affordable by every income earner group whether low-income, middle income and high income group. Malaysian

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Government has identified housing as basic human needs and one of the important components in urban economy. The My First Home Scheme programme, allows young potential house buyers who earn less than RM3,000 per month to obtain a 100-percent financing for houses costing between RM100,000 and RM220,000 with a repayment period of 30 years. The government had also increased the maximum housing loan amount for civil servants by 15 percent to RM450,000 since January 2011. In the 2010 Budget there was emphasis on the efforts to increase home ownership among the people. Among them is increase in the supply of low cost house units for purchase, the recovery of abandoned housing projects, and the launch of a scheme that enables Employees Provident Fund (EPF) contributor to use the existing fund and future savings in the Second Account for financing house with higher value or buying additional house.

In the recent 10th Malaysian Plan, the government has again given its focus on the development of 78,000 affordable houses and RM500 million funds to recover housing projects. While numerous guiding principles and policies held and implemented to protect the low-income group so that they could afford to own house, the ability to own houses among those middle income was not given enough attention. The rapid development in many big towns in Malaysia particularly in Kuala Lumpur and Selangor state has caused the property market price to increase drastically as shown in the statistics issued by the Ministry of Housing and Local Government of Malaysia.

This research carried out to find out affordability of home ownership level for first medium cost landed-house by the middle-income group in Selangor. Prior studies focus mainly on the low-income group and tenancy. For ground work, affordability measures in literature are compiled to make comparison among selected developed and developing countries. This research could be seen as able to contribute to the knowledge and understanding on vitality of housing affordability. It is hoped that the research finding will help in the development of housing policy for the country in the future.

2. Measuring affordability

Housing affordability is not a feature of housing but a feature of housing service in relation to consumer capacity and desire to own or buy the houses [1]. In Yang & Shen [1] study, Stone [2] has defined that housing affordability is a link between housing and people. Housing affordability is a selection decision function which is made by a family between housing and non-housing product expenditure. It reflects a balancing act in the household spending choice that is very subjective. Literature on housing affordability that cover measurement aspects are like Yang & Shen [1], Mengjie, et al [3], Lau & Li [4], Stone [2], and Bogdon & Can [5] ; on the aspect of development and effectiveness of policies or housing programme like Goh [6], Mengjie, et al [3], Niu [7], Mak et al [8], Buckley & Kalarickal [9] Guest [10] and Williams & Pannell [11].

Many studies have agreed that housing affordability measurement is complex. Reliance on index or measure which uses house price ratio to income analysis only would bring out less accurate results as discussed by Stone [2], Gan & Hill [12] and Thalmann [13]. Gan and Hill [12] in a study comparing two towns in two countries, have classified the measurement of housing affordability into three (3) distinct measures; purchase affordability, repayment affordability and income affordability. The paper has found many literature covering the latter, income affordability which mainly use Price-Income Ratio (PIR) as the measure.

PIR could be defined as median home price to median household income as used by many studies. For instance, The International Demographia (2006-2011) has surveyed selected house markets or cities in 6 English-speaking countries using PIR method. In its 7th Report, for housing markets to rate as “affordable”, housing should not exceed three times gross annual household income (the Median Multiple). In Table 1, the rating for affordability as defined by International Demographia is shown.

Table 1: Rating for Price-Income Ratio

Rating	Median Multiple
Severely Unaffordable	≥ 5.1
Seriously Unaffordable	4.1 – 5.0
Moderately Unaffordable	3.1 – 4.0
Affordable	≤ 3.0

Housing markets are rated as “affordable” at or below 3 times gross annual household income (Median Multiple), “moderately unaffordable” at or below 4 times income, “seriously unaffordable” at or below 5 times income and above 5, rated “severely unaffordable”. Table 2 shows the comparison of median PIRs for the selected countries.

Table 2 Median PIR for Selected Countries

Country	2005 2 nd Report	2006 3 rd Report	2007 4 th Report	2008 5 th Report	2009 6 th Report	2010 7 th Report	Demographia International, 2006-2011, Annual Demographia International Housing Affordability Survey
Australia	6.2	6.6	6.3	6.0	6.8	7.1	* Ho & Koh [14]
Canada	3.8	3.2	3.1	3.5	3.7	4.6	
Ireland	6.0	5.7	4.7	5.4	3.7	4.8	
New Zealand	5.9	6.0	6.3	5.7	5.7	6.4	
United Kingdom	5.9	5.5	5.5	5.2	5.1	5.1	
United States	4.6	3.7	3.6	3.2	2.9	3.3	
China – Hong Kong	-	-	-	-	8.4*	11.4	

From the literature reviewed PIR for cities in Asian countries were also compiled. Table 3 below shows the comparison among major cities in Asia.

Table 3 Price-Income Ratio for Selected Major Asia Cities

Country	Year	1992	1997	2002	2006	2009
1987						
China Beijing	- -	8.1	13.3	6.7	9.12 ^a	18.5 ^b ^a Menjie, et. al. [3] ^b Ho & Koh [14]
Taiwan Taipei	- 5.5	10.7	8.3	8.5	-	-
Hong Kong	- -	-	16.3	6.7	-	-
Japan Tokyo	- 7.4	8.2	6.9	5.9	-	-

In the comparison of the findings, it is interesting to note that PIRs in developed and developing Asian countries, have significant differences, with the ratios for these Asian cities are generally higher than the western developed countries. These ratios are volatile because these cities all experience house price fluctuation but income growth is steady.

Apart from income and house price aspects that could show someone's ability to pay house instalment, housing affordability could also be seen through education level Gyourko and Linneman [15], types of occupation Gyourko and Linneman, [15], number of households that work [16, 17] have children (Clark [16]; Dieleman and Everaers,[17];Feijten et al,[18], monthly house instalment and housing subsidies (Thalmann, [13]. Previous results of studies found that housing affordability index by the majority increasingly low, such as in selected cities in Australia, Canada, Republic of Ireland, New Zealand, United Kingdom, United States of America ,China (Yang & Shen [1]; Mengjie, et al[3]; Niu [7]; Mak et al [8]; Lau & Li [4], United Kingdom (Williams & Pannell [11]; and United States (Quigley & Raphael [19]

From the previous literature review, it is clear that there is a need to study housing affordability in Malaysia presently, coinciding with policy changes and the country's economic condition.

3. Research Scope

In this research, the research sample is first house buyer in identified housing zone. This is in accordance with the purpose of the study to measure housing affordability for landed medium cost house among first house owner. This study focuses on variables that influence medium income group ability to

own landed houses in Selangor. Among variables studied are household income, household spending, types of occupation, education level, have children, household that work and total monthly housing payment.

4. Research Design

Research strategy being used is quantitative in character. Basically, this research is based on the primary and secondary data. Primary data is through field studies which cover interview process, pre-test, case study and the usage of analytical measurement.

Following that, the study revolves around the existing method being used in Malaysia, to gauge first home affordability. After that, case study and analytical measurement will be used. Finally an index model will be established suitable with the measurement necessities.

Secondary data on the other hand is from literature review carried out. Literature study includes reading materials from journals, proceedings, books, thesis / dissertation, press cutting and publications issued by government agencies and private, whether in written form or through their websites.

5. Data Collection

Primary data collection undertaken through sets of questionnaires. It can be done through two method, namely by post or by interview. According To Ghani & Lee [20], questionnaire study by post practically does not receive high response rate although follow up reminder was carried out. Therefore on certain cases interview approach by structured with respondent is more effective.

Through interview, it could ensure that respondent really understand question's requirement and what most importantly, response on questionnaire can be obtained right after resolved interview session. Interview advantage by structured this is accurate response achieved, response rate usually high (especially interview session personal by researcher) and issue of 'why' respondent giving such response could be discerned [21]. Main criteria in sample selection are owners of first medium cost landed-house by the middle-income group in selected housing zone in Selangor state.

6. Conclusion

This study is hoped able to contribute towards understanding of affordability for first medium cost landed-house by the middle-income group in Selangor. Further survey results could help government in regulating effort to ensure high house ownership rate among people with targeted the majority would stay in cluster middle income.

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